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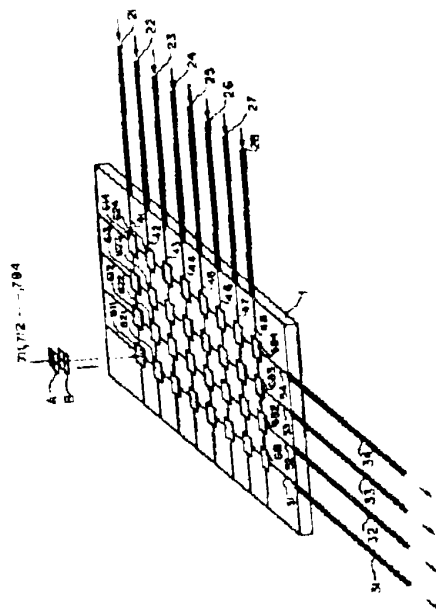
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APPLICANT : NIPPON TELEGR & TELEPH CORP
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TITLE : OPTICAL MATRIX SWITCH



ABSTRACT : PURPOSE: To provide the optical matrix switch which is small in size, low in loss and low in cost and has excellent longterm reliability and extremely large scale.

CONSTITUTION: Plug accepting holes 611 to 684 are provided at the respective matrix intersected points of matrix type optical waveguides 41 to 48, 51 to 54 provided on a substrate 1 and optical path switching plugs 711 to 784 which are bulk type optical parts are inserted into these holes. These plugs re selectively driven to any of the optical path switching states by a piezoelectric actuator and arbitrary desired optical switching between input optical fibers 21 to 28 and output optical fibers 31 to 34 is executed. The above-mentioned purposes are achieved by combining the advantages of the bulk type optical parts and the advantages of the three-dimensional optical waveguides and using a small- sized driving source as well.

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